

## **Riley County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 5/24/2016

Using the most recent IMPLAN data available (2014) adjusted for 2016, 19 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Riley County economy.<sup>1</sup>

These 19 sectors have a total direct output of approximately \$126.9 million and support 1,017 jobs in Riley County. Running the model for all 19 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Riley County Economy								
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	Output % of Gross Regional Product		
Direct Effect	1,017.0	2.65%	\$68,929,893.11	2.70%	\$126,857,541.92	4.96%		
Indirect Effect	185.2	0.48%	\$10,487,107.27	0.41%	\$16,613,079.11	0.65%		
Induced Effect	193.4	0.50%	\$13,191,435.20	0.52%	\$22,405,631.00	0.88%		
Total Effect	1,395.5	3.63%	\$92,608,435.57	3.62%	\$165,876,252.04	6.49%		

As shown in the above table, agriculture, food, and food processing sectors support **1,395.5 jobs**, or **3.63%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$165.9** million, roughly **6.49%** of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 19 agriculture, food, and food processing sectors is approximately \$92.6 million, or 3.62% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 3.62% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: <a href="http://www.implan.com/index.php?option=com\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70">http://www.implan.com/index.php?option=com\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70</a>

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the landscape and horticultural services sector is the top employer with **347.4 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Riley County.

Top Ten Sectors by Employment					
Sector	Total Employment	Total Output			
Landscape and horticultural services	347.4	\$21,431,607.72			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	278.6	\$33,113,593.98			
Animal production, except cattle and poultry and eggs	168.6	\$19,217,895.47			
Support activities for agriculture and forestry	111.4	\$5,313,635.44			
Bread and bakery product, except frozen, manufacturing	55.3	\$5,853,079.56			
Veterinary services	48.1	\$4,074,224.22			
Grain farming	27.4	\$10,588,055.98			
All other crop farming	25.7	\$2,103,446.56			
Wholesale trade	25.5	\$4,909,438.11			
All other food manufacturing	21.1	\$5,860,996.64			

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately \$33.1 million to the Riley County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Sectors by Output					
Sector	Total Employment	Total Output			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	278.6	\$33,113,593.98			
Landscape and horticultural services	347.4	\$21,431,607.72			
Animal production, except cattle and poultry and eggs	168.6	\$19,217,895.47			
Oilseed farming	12.5	\$15,261,700.21			
Grain farming	27.4	\$10,588,055.98			
All other food manufacturing	21.1	\$5,860,996.64			
Bread and bakery product, except frozen, manufacturing	55.3	\$5,853,079.56			
Support activities for agriculture and forestry	111.4	\$5,313,635.44			
Wholesale trade	25.5	\$4,909,438.11			
Owner-occupied dwellings	0.0	\$4,320,751.10			

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Riley County economy.

All Agriculture, Food, and Food Processing Sectors				
Sector	Total Employment	Total Output		
Oilseed farming	12.5	\$15,261,700.21		
Grain farming	27.4	\$10,588,055.98		
Vegetable and melon farming	1.2	\$253,329.20		
Fruit farming	1.5	\$164,186.07		
Tree nut farming	0.0	\$147.62		
Greenhouse, nursery, and floriculture production	9.1	\$1,534,528.55		
All other crop farming	25.7	\$2,103,446.56		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	278.6	\$33,113,593.98		
Dairy cattle and milk production	9.9	\$3,637,192.96		
Poultry and egg production	0.8	\$616,440.29		
Animal production, except cattle and poultry and eggs	168.6	\$19,217,895.47		
Commercial logging	0.8	\$47,440.94		
Meat processed from carcasses	5.8	\$2,626,593.41		
Bread and bakery product, except frozen, manufacturing	55.3	\$5,853,079.56		
Frozen cakes and other pastries manufacturing	3.0	\$426,913.42		
All other food manufacturing	21.1	\$5,860,996.64		
All other industrial machinery manufacturing	0.2	\$46,169.12		
Veterinary services	48.1	\$4,074,224.22		
Landscape and horticultural services	347.4	\$21,431,607.72		

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Riley County, the retail sector was omitted.